

JUMBO MINING CO.

6305 Fern Spring Cove
Austin, Texas 78730
(512) 346-4537
Telex # 76-7177

June 1, 1990
File: UDH610

Mr. Kiran L. Bhayani, P.E.
Manager, Design Evaluation
Bureau of Pollution Control
Utah Department of Health
Division of Environmental Health
P.O. Box 16690
Salt Lake City, Utah 84116-0690

DOGM
MINERALS PROGRAM
FILE COPY

RECEIVED
JUN 07 1990

Dear Mr. Bhayani:

Re: DRUM MINE PROJECT
Your letter April 27, 1990

In your referenced letter you requested that we submit for your review a map showing our monitoring well locations, lab testing results, as well as any new information regarding pollutants in the monitoring well system.

Please find attached information which is responsive to the above requests. It is worth noting that a trace of cyanide was reported in a sample of water from the Busby Spring, located a mile or two distant from the heaps, and several hundred feet above the tops of the highest heaps. I believe this points to the limits of accuracy of the analytical methods available, rather than to a true cyanide content. Alternatively, it could mean that a small amount of cyanide may exist from natural sources in this area.

Since reviewing this information with Mack Croft and David Rupp on site, we have attempted to determine flow rates by pumping from some of the monitoring wells. It is evident from these pumping tests that the porosity and/or permeability of these rock formations is very limited, and, from this it can be inferred that the quantity of water contained in this area is minimal, certainly not enough to meet the definition of an "aquifer", as far as we can determine.

From the information we have gathered to date, we can only conclude that there is a small amount of water on a perched water table in the area indicated, and that the water quality in it meets drinking water standards, with respect to the trace of cyanide in it. (See attached log of Monitoring Holes and attached analyses certificates from the Southern Utah State Testing Lab.)

The fact that the level of the water table in many instances is above the bottom of the heaps which have been active since we took over the property two years ago, leads us to the conclusion that this trace of cyanide likely came from heap No. 6 or No. 3 LG, when they were being leached several years ago. Neither of these heaps have been leached at any time since we took over the property over two years ago. We base

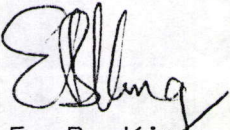
this conclusion on the relative elevations of the heaps and the fact that there is evidence that both had leaked at one time. (See attached water levels in the monitoring holes and the water level contours drawn on the location map from these figures.)

We will continue to monitor this situation throughout the summer and advise you if we see any significant changes.

Pursuant to the 60 day leak test on heaps No. 7 and No. 2LG, please find enclosed copies of the Neutron Logging of the test wells located down dip from these two heaps. These tests were completed recently in anticipation of starting of the sprinkling test of these two heaps, pursuant to our earlier agreement thereon. As you will recall, this Neutron logging is a repeat of that done last November, following which the sprinkling was aborted due to freezing weather. You have in your files the earlier set of logs.

As you are aware, the OGM has prohibited us from going forth with this test until the reclamation issue on these heaps has been resolved with the prior owner/operator of the property. We believe that this is now the only issue to be resolved before this test starts. Please let us know if you do not agree.

Sincerely yours,



E. B. King
President

cc: (without Neutron Logs)

Roger Foisey, Central Utah District Health Dept., Richfield.
BLM, House Range Resource Area, Fillmore
Wayne Hedberg, Oil, Gas & Mining
D. Hartshorn, Drum Mine

DRUM MINE Monitoring Holes

Hole #	Hole Depth	Collar Elev	Water Elev	Depth to Water	pH	CN - PPM		
						FREE	TOTAL	
1	66'	5950	5920	30'	7.6	ND		
2	100'	5940	5885	55'	7.2	ND		
3	124'	5935	5873	62'	7.0	ND		
7	139'	5958	5929	29'	7.1	ND		
8	50'	5958	5922	36'	7.3	0.07	0.60	*
9	50'	5971	—	—	—			
10	50'	5974	5941	33'	7.2	ND		
17	49'	5960	5937	23'	7.4	0.12	0.44	*
18	49'	5972	5951	21'	7.2	ND		
19	71'	5987	5962	25'	6.8	ND		
23	105'	5998	5922	76'	8.2	ND		
24	105'	6006	5975	31'	8.2	ND		
25	105'	6006	5934	72'	8.0	ND		
27	105'	5995	5914	81'	8.1	ND		
28	105'	5990	5887	103'	7.9	ND		
31	100'	5967	5948	19'	7.7	ND		
32	105'	6015	5956	59'	8.7	ND		
33	105'	5957	5938	19'	8.0	ND		
34	105'	5949	5940	9'	7.7	ND		
35	105'	5940	5925	15'	7.8	ND		
NH-81 (BUSBY SPRING)		—	—	—	7.8	0.03	0.08	*
HEAD NEUTRALIZATION SPECIFICATION						0.20	0.75	
NOTE -		ND = NOT DETECTABLE BY CONTROL TITRATION PROCEDURE USED BY DRUM						
		* = ANALYSES BY SOUTHERN UTAH STATE TESTING LAB - ATTACHED REPORT						

SOUTHERN UTAH STATE TESTING LAB
SCIENCE BLDG. - ROOM 010
351 WEST CENTER
CEDAR CITY, UT 84720

SAMPLE NUMBER : K0900234

COST : 23.50

TIME COLLECTED : 13:00

DATE COLLECTED : 3-8-90

DATE RECIVED : 12-MAR-1990

DATE COMPLETED : 22-MAR-1990

DATE SENT : 3-29-90

INVOICE NUMBER : G-K0900234

COLLECTOR : DAVE HARTSHORN

SITE LOCATION : MH-81 *BUSBY SPRING*

SEND RESULTS TO : JUMBO MINING
P.O. BOX 999
DELTA, UT 84624

ALL RESULTS IN MILLIGRAMS/LITER (ppm)

ANIONS	CATIONS	CATIONS	GEN PRAM	OXYGEN	CHECKS
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0.08 CN

TOTAL

< 1. K

0.03 Fr-CN

FREE

NOTES :

SOUTHERN UTAH STATE TESTING LAB
SCIENCE BLDG. - ROOM 010
391 WEST CENTER
CEDAR CITY, UT 84720

SAMPLE NUMBER : K0900150

COST : \$30.10

TIME COLLECTED : 13:30

DATE COLLECTED : 2-15-90

DATE RECIVED : 21-FEB-1990

DATE COMPLETED : 19-MAR-1990

DATE SENT : 3-20-90

INVOICE NUMBER : G-K0900150

COLLECTOR : L. SCHENA

SITE LOCATION : MH-17

SEND RESULTS TO : JUMBO MINING
P.O. BOX 999
DELTA, UT 84624

ALL RESULTS IN MILLIGRAMS/LITER (ppm)

ANIONS	CATIONS	CATIONS	GEN PRAM	OXYGEN	CHECKS
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0.44 CN

TOTAL

5. K

0.12 Fr-CN

NOTES :

Free

SOUTHERN UTAH STATE TESTING LAB
SCIENCE BLDG. - ROOM 010
351 WEST CENTER
CEDAR CITY, UT 84720

SAMPLE NUMBER : K0900151

CGST : \$30.10

TIME COLLECTED : 13:00

DATE COLLECTED : 2-15-90

DATE RECIVED : 21-FEB-1990

DATE COMPLETED : 19-MAR-1990

DATE SENT : 3-20-90

INVOICE NUMBER : G-K0900151

COLLECTOR : L. SCHENA

SITE LOCATION : MH-8

SEND RESULTS TO : JUMBO MINING
P.O. BOX 999
DELTA, UT 84624

ALL RESULTS IN MILLIGRAMS/LITER (ppm)

ANIONS	CATIONS	CATIONS	GEN PRAM	OXYGEN	CHECKS
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0.60 CN

TOTAL

11. K

NOTES :

0.07 Fr-CN
Free

